

Date: Fri, 21 Jan 94 04:30:02 PST
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V94 #7
To: packet-radio

Packet-Radio Digest Fri, 21 Jan 94 Volume 94 : Issue 7

Today's Topics:

 returned mail -- invalid userid

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 20 Jan 94 12:57:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: returned mail -- invalid userid
To: packet-radio@ucsd.edu

The following message did not contain a valid DESY userid.
Since we were not able to identify the correct userid, the message will
be returned to you.
Please check your address list and try again with the correct userid.
It would be helpful to supply the full name of the addressee.

----- text of the message with invalid userid follows -----

> Received: from ucsd.edu by Sdsc.Edu (sds.sdsc.edu STMG) via INTERNET;
> Wed, 19 Jan 94 13:49:57 GMT
> Received: from localhost by ucsd.edu; id EAA22412
> sendmail 8.6.4/UCSD-2.2-sun
> Wed, 19 Jan 1994 04:30:04 -0800 for packet-radio-list
> Errors-To: packet-radio-relay@UCSD.EDU
> Sender: packet-radio-relay%UCSD.EDU@Sdsc.BITnet
> Precedence: List
> Received: from localhost by ucsd.edu; id EAA22390

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>      sendmail 8.6.4/UCSD-2.2-sun
>      Wed, 19 Jan 1994 04:30:03 -0800 for packet-radio-ddist
> Message-Id: <199401191230.EAA22390@ucsd.edu>
> Date: Wed, 19 Jan 94 04:30:01 PST
> From:      packet-radio%UCSD.EDU@Sdsc.
>      BITnet (Packet-Radio Mailing List and Newsgroup)
> Errors-To: Packet-Radio-Errors@UCSD.EDU
> Reply-To: Packet-Radio%UCSD.EDU@Sdsc.BITnet
> Precedence: Bulk
> Subject: Packet-Radio Digest V94 #5
> To:        packet-radio%UCSD.EDU@Sdsc.BITnet
>
>
> Packet-Radio Digest      Wed, 19 Jan 94      Volume 94 : Issue      5
>
> Today's Topics:
>      Higher Speeds with the G3RUH 9600 baud Packet Radio Modem
>
> Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
> Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
> Problems you can't solve otherwise to brian@ucsd.edu.
>
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> (by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".
>
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> policies or positions of any party. Your mileage may vary. So there.
> -----
>
> Date: 18 Jan 94 19:42:35 GMT
> From: news-mail-gateway@ucsd.edu
> Subject: Higher Speeds with the G3RUH 9600 baud Packet Radio Modem
> To: packet-radio@ucsd.edu
>
> $RUH93235
>
>      Higher Speeds with the G3RUH 9600 baud Packet Radio Modem
>      -----
>
>                      by James Miller G3RUH
>
>
>                      1993 Aug 23
>
> The modem is capable of speeds up to 64000 baud. This limit is set by the
> maximum rate that the DAC chips can operate. This note describes how to
> achieve rates from 4800 to 64000 baud. The slowest speed is suitable for
> 12.5 kHz channelised radios. The highest speed suits radios that have
> broadcast FM bandwidth filters.

```

>
> To implement a higher speed you need to:
>
> 1. Increase your TXData rate (!)
> 2. Increase the associated TXClock
> 3. Change some analogue filter components proportional to
> the speed increase.
>
> It is not necessary to change either of the eproms. If you are going
> for a higher speed, it is likely that the radios involved are "specials"
> and you will already have wide bandwidth and flattish group delay, so the
> loopback selection 0 from the standard ROM will be OK.
>
> The table below suggests the best conditions for different speeds.
> Component references are for my own PCB card. Clones are different.

	Data Rate - Baud				
Comp	4800	9600	19200	38400	64000

R6	220k	100k	47k	22k	15k
R16	100k	100k	100k	47k	15k
R17	82k	82k	82k	39k	12k
R18	39k	39k	39k	18k	5k6
R19	27k	27k	27k	15k	3k9
R21	100k	100k	100k	47k	15k
R22	56k	56k	56k	27k	8k2
C18	4n7	4n7	4n7	1n	680p
C20	220p	100p	47p	22p	12p
C27	2n2	1n	470p	470p	1n)
C28	2n2	1n	470p	470p	1n)
C29	6n8	3n3	1n5	470p	470p) 2% or
C30	220p	100p	47p	47p	100p) better
C31	1n	470p	220p	220p	470p)
C32	2n2	1n	470p	220p	150p)

Deviation +/-	1.5	3	6	12	20 kHz) In FM
IF Bandwidth	8	15	30	60	100 kHz) service

>
> These modifications have been tested in both amateur and commercial
> service. All comments gratefully received, and added to the database.

>
>
> 73 de James G3RUH @ GB7DDX.#22.GBR.EU 1993 Aug 23 [Mon] 0917 utc
>

> -----
>
> End of Packet-Radio Digest V94 #5
> *****

End of Packet-Radio Digest V94 #7

